

#### **WINTER 1999**

#### Office of Oceanic and Atmospheric Research

#### **VOLUME 1 NUMBER 1**

I hope you enjoy reading Samples, our new newsletter that focuses on the people and programs of NOAA Research. The name, Samples, is taken from much of the work we do—we sample the air, the ocean and the space between the earth and the sun. It also refers to the newsletter offering a sample of each of the areas within NOAA Research - the OAR laboratories, Sea Grant, the National Undersea Research Program, the Office of Global Programs, and the Joint and Cooperative Institutes. We are fortunate to have an organization with so many talented people doing so many interesting things — both at work and away from the office. This will be a great way to learn about your NOAA Research colleagues whether they work on the same floor as you or in a laboratory or university across the country.

I've been promised a spot in Samples so you can expect to see a column from either me or Louisa Koch, Deputy Assistant Administrator. If there are topics you would like to see addressed in this space, contact Jana Goldman in Public Affairs at <a href="mailto:janag@hq.oar.noaa.gov">janag@hq.oar.noaa.gov</a>.



As you may know, October 1 was the official date for the OAR reorganization. Two major changes took place. First, the position of the ERL director has been eliminated; the labs now report directly to the AA/DAA. Second, the newly established Associate Directors will work toward describing all of our programs in these three thematic areas: Climate, Atmosphere, and Ocean/Coastal Resources. Our goal is to articulate and plan for what we do with more emphasis on the science and programs and less on the traditional org chart.

We are doing this to better serve our customers, both inside NOAA and the American public at large. If you are reading this, you are likely one of our inside NOAA customers, and I hope you find that this publication serves your need for better communication within OAR, something that was requested by a large number of those responding to the Survey Feedback Action conducted last year. Like anything new, Samples needs to fully develop. I hope you will offer suggestions to Jana Goldman about things you would like to read about in future issues.

## **Aquarius Ends '99 Season**

NOAA's *Aquarius*, the only underwater habitat that allows scientists to live and work underwater, ended its 1999 mission season in November. While it has been a season filled with discovery about the health of the coral reefs around Florida's Keys, it has also been dotted with events dictated by Mother Nature. Hurricane Floyd caused the cancellation of one mission and Hurricane Irene caused a team that was already aboard *Aquarius* to be brought to the surface.

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#### Sea Grant Researchers Find Invasive Water Fleas in Lake Michigan

How could something just one centimeter in size cause enormous problems in Lake Michigan? Easy, when it is a water flea with no known enemies in the area.

Researchers with the National Sea Grant College Program report that *Cercopagis pengoi* (sometimes called the fishhook flea) has recently invaded the waters of southern Lake Michigan. Tiny but prolific, it reproduces rapidly, has no known predators, and has the potential

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## **AOML Techies Are Tops!**

A trio of scientists from the Atlantic Oceanographic and Meteorological Laboratory in Miami, FL took top honors at the NOAA Tech 2000 for their hurricane wind analysis system. "This was a great opportunity for AOML to showcase our work," said Nirva Morisseau-Leroy, who with Shirley Murillo and Sonia Otero won the coveted "Best JAVA Implementation" award.

The trio was up against some stiff competition from teams representing six other institutions, but the AOML trio prevailed. The system, created by a team of AOML scientists, is used by AOML's Hurricane Research Division



Shirley Murillo, Nirva Morisseau-Leroy, Sonia Otero, and Bill Turnbull, Deputy Director of NOAA's Office of High Performance Computing and Communications.

(HRD). Nirva, Shirley, and Sonia gave a flawless demonstration of their system depicting observations and the resulting wind analysis from Hurricane Floyd. HRD scientists will be implementing the JAVA-based program during the 2000 hurricane season at AOML and the National Hurricane Center.

NOAA Tech 2000 was sponsored by the Office of High Performance Computing and Communications in cooperation with the NOAA Advisory Review Board.

## THERE'S MORE THAN THERE SEEMS AT CIMAS

Researchers working at the Cooperative Institute for Marine & Atmospheric Studies (CIMAS) in Florida have their laboratory at their doorstep.



One of NOAA's 11 joint or cooperative institutes, CIMAS is located on Virginia Key in Miami, FL, just across the causeway from the Atlantic Oceanographic & Meteorological Laboratory and the Southeast Fisheries Research Center, both of which work closely with CIMAS.

CIMAS is a joint institute between NOAA and the University of Miami's Rosenstiel School of Marine and Atmospheric Sciences, so it isn't surprising that the work conducted there falls into three major themes – climate variability, fisheries dynamics, and coastal ocean ecosystem processes.

CIMAS serves as a way to bring together the research resources of the University with those of the OAR laboratories, National Marine Fisheries Service, and other branches of NOAA to develop a center of research excellence.

The joint/cooperative institutes work to better understand the oceans, Great Lakes, inland waters, arctic regions, solar terrestrial environment, intermountain west, and atmosphere.

Although the institutes are diverse in the work they do and geographic location, they are unified under the new identifier shown above, designed by Donna Brown.

## THE OFFICE OF GLOBAL PROGRAMS RETURNS HOME

During the OAR reorganization party in mid-October, Michael Hall, director of the Office of Global Programs, told those assembled for the occasion that it was good that OGP is again part of OAR. "We were born in OAR and we belong in OAR," Hall said.

OGP leads the NOAA Climate and Global Change Program. NOAA has the primary responsibility within the federal government to routinely provide climate forecasts and products to the nation. To that end, OGP sponsors focused scientific research aimed at understanding climate variability and its predictability.

Understanding the global climate system is OGP's major focus. Through its efforts OGP has assisted NOAA in augmenting the state of science in the United States, guided the development of our research efforts, and provided valuable scientific data and information for practical use and social and economic benefit.

"The privilege of working in this community and working on global change gives us the opportunity to work with the best of the best," Hall said.

Hall also is the Associate Director for Climate, one of the three new associate director positions created through the reorganization.

## Teacher at Sea Program

Do you know a teacher who would be interested in participating in a research cruise? NOAA Research can place teachers on the R/V Ron Brown for cruises in 2000 (<a href="www.pmc.noaa.gov/schedule/rb.htm">www.pmc.noaa.gov/schedule/rb.htm</a>) through the NOAA Teacher at Sea Program (<a href="www.tas.noaa.gov">www.tas.noaa.gov</a>). Interested teachers should contact John Schmidt (John.P.Schmidt@noaa.gov) for more information.

#### **OAR PEOPLE**

**Peter Landrum**, a scientist at the Great Lakes Environmental Research Laboratory in Ann Arbor, MI, received the Founders Award from the Society of Environmental Toxicology and Chemistry. The award is given annually in recognition of outstanding career achievements and contributions to the environmental sciences

Alison Grimsdell, a graduate student at the Aeronomy Laboratory, will receive the American Meteorological Society Robert Leviton Award for the best student paper on the development or evaluation of atmospheric instrumentation or unique measurement technique.

*Susan Solomon*, senior scientist at the Aeronomy Laboratory, has been selected to receive the year-2000 Carl-Gustaf Rossby Research Medal from the American Meteorological Society.

*Karen Rosenlof*, scientist at the Aeronomy Laboratory, has been selected to receive the year-2000 Clarence Leroy Meisinger Award from the American Meteorological Society.

*JoAnn Joselyn*, a recently retired scientist from the Space Environment Center, was elected Secretary General of the International Union of Geodesy and Geophysics for an eight year term as of October 1, 1999.

*Tom Greenwald* and *Tom Vonder Haar* of the Cooperative Institute for Research in the Atmosphere were named by the National Space Agency of Japan to the Science Team for the Advanced Microwave Scanning Radiometer to be launched on Japan's ADEOS-2 Satellite.

The following individuals are the recipients of the 1999 Department of Commerce Adminstrator Award: Leon Cammen, Thomas E. Croley, II, Peter F. Landrum, Francis A. Achiermeier, Alex Hsia, Elizabeth Hess, and Mary Catherine Steward.

#### OAR KEY DATES

**January 9 - 14, 2000** American Meteorological Society annual meeting in Long Beach, California.

January 11 - 13 OAR Budget Conference in Rosslyn, VA

**February 17 - 22** American Association for the Advancement of Science annual meeting in Washington, DC.

Congratulations to *Isaac M. Held*, the OAR employees on the National Weather Service's AWIPS team (*Carl Bullock*, *Joseph Wakefield*, *Darien Davis*, and *Uwe Herbert Grote*), and The Real Time Solar Wind Project Team (*Ronald Zwicki*, *Susan Sahm*, *Viola Raben*, *Richard Grubb*, *Kent Doggett*, *Thomas Detman*, and *William Barrett*) for being awarded the 1999 Department of Commerce Gold Medal.

David Schwab, Lisa Farrow, Jim Murray, and The Stormscale Research and Application Division were awarded the 1999 Department of Commerce Silver Medal.

Matelon (Irma) duPree, Marilyn Moll, Steve Ryan, Victor Omelczenko, Thayne Thompson, Michael Uhart, Robert Rubin, William H. Hooke, Warren Keenan, Steve Piotrowicz, The David Skaggs Research Center Common Space Committee (Barbara Poppe - Lead), The National Sea Grant College Program (Ron Baird - Director), The NOAA-Boulder Network Working Group (Rich Beeler, Bob Clark, Richard Grubb, Eric Hackathorn, Walter Harrop, Alex Hsia, Jerry Janssen, Robert Masten, Donald Mock, Brian Moore, Kirk Thoning, and Stan Wilkison), and the group of James L. Buizer, Candyce Clark, Randy Dole, Mark Eakin, Lisa Farrow, Claudia Nierenberg, and Brigitte Thompson were awarded the 1999 Department of Commerce Bronze Medal.

answer can be read vertically from the highlighted column once the 12 clues have been answered. [Hint: All of the answers can be found somewhere]			
in this newsletter.] Submit your final answer to samplespuzzle@hq.oar.noaa.gov by January 31, 2000. A winner will be randomly chosen			
from all of the correct answers submitted and will receive a NOAA mug.			
1) CIMAS is a joint institute between and the Rosenstiel School of Marine and Atmospheric Sciences.	1)		
2) The OAR program leading the NOAA Climate and Global Change Program.	2)	Ц	
3) AOML Scientists won the award for "Best Implementation" at NOAA Tech 2000.		Ц	
4) The name of this newsletter.		Ш	
5) The only underwater habitat that allows scientists to live and work underwater. 5)		Ц	
6) Under the reorganization, the position of the director has been eliminated.	6)	Щ	
7) Climate,, and Ocean/Coastal Resources are the 3 OAR thematic areas. 7)		Щ	
8) Among other things, CIMAS conducts research in coastal ecosystem processes. 8)		Щ	
9) Michael Hall is the new Associate Director for 9)		Щ	
10) Whose researchers identified a tiny water flea in Lake Michigan?		Ц	
11) 10 OAR candidates have been chosen to participate in the		Ш	
12) Dave Evans or Louisa will write a column for every issue of this newsletter. 12)			

Use the clues to fill in the horizontal blanks. The answer for the first clue goes in the top row the second clue in the next row and so on. The final

# **The Leadership Competencies Development Program (LCDP)**

The Leadership Competencies Development Program will provide training and a series of developmental experiences for a cadre of individuals who have high potential for assuming executive level/leadership responsibilities in scientific positions. This formative program will be completed over an 18 to 24 month period. It will include the following: individual development plans to lay the groundwork and ensure each person will gain appropriate skills/experience, formal training in a range of subjects/issues facing OAR and NOAA leaders, career broadening rotational assignments, and a formal mentoring program. While the OAR/LCDP is expected to be an important source of candidates for senior level and/or executive positions, successful completion of the program does not guarantee selection for such jobs.

Congratulations to the following candidates who have been selected to participate in the first Leadership Competencies Development Program:

Joan Brundage Doug Forsyth Christopher G. Fox Silvia L. Garzoli Albin J. Gasiewski

Judith Gray
David Jorgensen
Richard J. Lataitis
Michael Uhart
Thomas Watson

#### (continued from page 1) Aquarius

"We take a conservative approach toward storm planning to prevent the dangerous situation of saturated aquanauts trapped in Aquarius under severe tropical storm or hurricane conditions," said Dr. Steven Miller, Director of the National Undersea Research Center at the University of North Carolina at Wilmington, which administers and operates the *Aquarius* program. So, when Hurricane Irene started heading for the Florida Keys, where *Aquarius* is deployed at a depth of 20 meters, the 17-hour decompression process began. The aquanauts were brought safely to shore.

This season also gave many people their first look at life aboard *Aquarius*, via a mini-camera that sent back images of the aquanauts working and living to those who were watching on the Aquarius website: <a href="https://www.uncwil.edu/nurc/aquarius">www.uncwil.edu/nurc/aquarius</a>.

Another glimpse of working underwater was offered via video by a team of visiting Japanese scientists from the Japan Marine Science and Technology Center (JAMSTEC). The team filmed underwater training exercises and the scientists' introduction to living beneath the ocean's surface. The 2000 missions are slated to begin in February.



Dr. David Stein, of the OAR Office of Scientific Support, collects and restores old British motorcycles. Last summer, he took one of them (a 1950 Vincent Black Shadow) to the Isle of Man for the 50th Anniversary of the Vincent Owners Club. The Rally, which lasted for a week, included the opportunity to make a complete lap of the closed Isle of Man Tourist Trophy road race course (37.5 miles), which is composed of public roads. This picture was taken at the hump-backed stone Ballaugh Bridge. Hitting the bridge at any speed over 35 mph results in "aviating;" normal approach speed is very fast, but David, not wanting to hit the hotel opposite, slowed down to 40 by the time he was on the bridge roadway.

#### (continued from page 1) Sea Grant

to alter the composition of the food chain. Patrice Charlebois, biological resources specialist for Illinois-Indiana Sea Grant noted that although this water flea was found earlier this year only in Grand Traverse Bay, it is now invading southern Lake Michigan.

It was first spotted in the open waters of southern Lake Michigan by a charter boat captain. The captain noticed the masses (which can look and feel like wet cotton batten) on his lines and knew they were different from the spiny water flea, *Bythotrephes cederstroemi*.

Charlebois checked zooplankton samples collected in the same area but closer to shore by her home institution, the Illinois Natural History Survey's Lake Michigan Biological Station. She found them to be not only present in the sample, but fairly abundant. Charlebois has followed the invasion of the spiny water flea and worries that this new species could cause even greater problems for the Lake Michigan ecosystem.

Samples can also be viewed online at the following Internet Web Site Address: www.oarhq.noaa.gov/rm/Samples

## Send Us a Sample ....

Let us know what you think about this newsletter. What's missing? What do you like? What don't you like? Like your mother often said, "This is for your own good," but we need to know what you want. Send comments to Jana Goldman or Karen Tolson with your suggestions! <code>janag@hq.oar.noaa.gov</code> or <code>karent@hq.oar.noaa.gov</code>